

REMARKS

Reconsideration of this application, as amended, is earnestly requested.

Claims 23, 27, 40, 43, and 46 are amended for clarity and are all the claims pending in the application.

103 Rejections

Claims 23, 27, 40, 43, and 46 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Takiyasu et al. (US 5,537,414) in view of Feinberg et al. (US 6,065,046). These rejections are respectfully traversed.

Independent claim 23 recites "A method for transmitting a data frame having a header portion and a data portion from a mobile station to a base station ...; assigning a first field of the header portion to indicate whether the data frame has a request of a time resource while data included in the data portion is transmitted simultaneously with the request...; assigning a second field of the header portion to identify an amount of the time resource requested, when the first field has the first logic value; assigning a third field of the header portion to contain a priority parameter...; and transmitting the data frame at one transmission interval to the base station."

In the Advisory Action, the Examiner asserts that Takiyasu "discloses a request field R3 and an information field R4, which together is interpreted as Applicants' data frame having a header portion and a data portion" transmitted from a mobile station to a network. However, it is respectfully asserted that the request field R3 and the information field R4 of Takiyasu consists of a plurality of transmission units (slots) transmitted at a separate transmission interval from one or more source stations to a base station (each RS field), from the base station to each source station (from GT 44 to SA 48 at each FS 38i field), again from one or more source stations to a destination station via the base station (from GT 49 to CC 55 at each FS 38i field) and from a destination station to the source station via the base station (from GT 56 to AI 59 at each AS 39i field). Thus, the request field R3 and information field R4 of Takiyasu, together, is not a data frame transmitted at one transmission interval from a mobile station to a base station, as recited in claim 23.

Specifically, the request field R3 of Takiyasu has a request mode (RM) field 36 and a plurality of request slots (RS) 37a...37i. Each RS 37i is transmitted from each source station to the base station at a respective transmission interval. Moreover, it is respectfully noted that a guard time (GT) is used to absorb a shift of timing between the mobile stations. Thus, the transmission timing of each mobile station is different from each other (see Col. 13 line 32 to Col. 14 line 25; Col. 14 lines 35-49; Figs. 2 and 3).

Also, the information field R4 of Takiyasu has a plurality of fragment slots (FS) 38a...38i, and a plurality of reply slots (AS) 39a...39i. The contents of each fragment slot (FS) 38 starting from a guard time field (GT) 44 to a destination address (SA) 49 are set by a base station and transmitted from the base station to each source station. SA 49 of each FS is used by the base station as an access permission for the source station. After checking the SA 49 of the FS, the source station set the contents from a guard time field (GT) 49 to a CC field 32 of each FS 38, and transmits the contents to a destination station via a base station. Each AS 38i is a transmission unit transmitted from a destination station to the source station via the base station.

Thus, it is respectfully noted that each FS and each AS are transmitted at a separate transmission interval from the base station to the source station, from the source station to the destination station or from the destination station to the source station. Further it is respectfully noted that each FS has two separate transmission units also transmitted at a separated transmission interval from the base station to the source station or from the source station to the base station. Accordingly, each GT in the communication frame 30 of Takiyasu separates the respective transmission units transmitted at the respective transmission timings through different transmission paths.

For at least these reasons, it is respectfully submitted that the request field R3 and the information field R4 of Takiyasu, either alone or together cannot be interpreted as the data frame transmitted at one transmission interval from a mobile station to a base station of claim 23, because the request field R3 and information field R4 of Takiyasu consists of a plurality of transmission units, each of which is transmitted at a separate transmission interval and transmitted from a source station to a base station, from a base station to a source station, from a destination station to a base station, etc.

In the Advisory Action, the Examiner also asserts that Feinberg discloses a request-resource flag (ResourceReq), therefore, a combination of Takiyasu and Feinberg discloses a field indicating that another field has a time resource request. However, it is respectfully noted that Feinberg and Takiyasu fail to disclose "a first field of the header portion to indicate whether the data frame has a request of a time resource while data included in the data portion is transmitted simultaneously with the request" when the data frame is transmitted at one transmission interval from a mobile station to a base station, as recited in claim 23.

The ResourceReq of Feinberg merely indicates whether the packet constitutes a request for a resource. That is, when the ResourceReq of Feinberg indicates that the packet constitutes a resource request, the packet does not transmit any other data with the header information. However, a data frame of claim 23 includes a first field of the header portion to indicate whether the data frame has a request of a time resource while data included in the data portion is transmitted simultaneously with the request.

Moreover, the communication frame 30 of Takiyasu combined with Feinberg also fails to teach a first field of the header portion to indicate whether the data frame has a request of a time resource while data included in the data portion is transmitted simultaneously with the request. It is respectfully noted that Takiyasu teaches that the source station transmits a request for fragment slot access right to the base station (at a first transmission interval), and the base station determines whether to permit this request using a source address (SA) field 48 of each FS 38i (at a second transmission interval). The source station checks the SA field 48 of each FS, and if it finds its own address in the SA field 48, the source station determines that the request was permitted and transmits the data using the information field (I) 54 of each FS (at a 3rd transmission interval) (see Col. 14 line 42 to Col. 15 line 5 and Fig. 3 of Takiyasu).

Thus, Takiyasu combined with Feinberg fails to teach a first field of the header portion to indicate whether the data frame has a request of a time resource while data included in the data portion is transmitted simultaneously with the request.

Furthermore, because the combination of Takiyasu and Feinberg does not teach or suggest the data frame transmitted at one transmission interval from a mobile station to a base station, it is respectfully submitted that the combination of Takiyasu and Feinberg also does not teach or suggest the second field and third field of the header portion of claim 23, which are transmitted via the data frame transmitted at one transmission interval from the mobile station to the base station.

In view of the forgoing, it is respectfully submitted that claim 23 is allowable over the combination of Takiyasu and Feinberg.

Independent claims 27, 40, 43 and 46 recite features similar to independent claim 23. Therefore, for the reasons stated above with respect to claim 23, it is respectfully submitted that claims 27, 40, 43 and 46 are also patentable over Takiyasu and Feinberg.

CONCLUSION


In view of the above amendments and remarks, applicant respectfully requests reconsideration and withdrawal of the rejections, and an early indication of the allowance of the claims. Applicant believes the claims are in a condition for allowance and respectfully solicit favorable action.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein; and no amendment made was for the purpose of narrowing the scope of any claim, unless applicant has argued herein that such amendment was made to distinguish over a particular reference or combination of references.

If any points remain at issue which the Examiner feels may be best resolved through a telephone interview, the Examiner is kindly invited to contact the undersigned at (213) 623-2221.

Respectfully submitted,
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